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(54) Title: SYNERGY OF DOPAMINE D2 AND ADENOSINE A2 RECEPTORS ACTIVATES PKA SIGNALING VIA BETA/GAMMA DIMERS

(57) Abstract: This invention pertains to the discovery that a dopamine receptor agonist can activate PKA signaling and/or can act synergistically with an adenosine receptor to activate such signaling. In various embodiments, this invention exploits the synergy between the dopamine receptor pathway and an adenosine receptor pathway to provide methods of mitigating one or more symptoms produced by the chronic consumption of a substance of abuse or to mitigate one or more physiological and/or behavioral symptoms associated with cessation of chronic consumption of a substance of abuse. In certain embodiments, the methods involve administering to the mammal an effective amount of an adenosine receptor antagonist; and an effective amount of a dopamine receptor antagonist; where the effective amount of the adenosine receptor antagonist is lower than the effective amount of an adenosine receptor antagonist administered without said dopamine receptor antagonist.

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